

# Protecting Foundations Under Dry Conditions



## Foundation Watering with a Soaker Hose



Place the soaker hose around the perimeter of the house 8 to 18 inches away

from the foundation. Before attaching the soaker hose to the faucet, make sure you have a backflow preventer on the faucet. The first time you run the soaker hose, take off the end cap and run water through the hose to clean out any debris. Soaker hoses run best with low pressure. You do not need to turn the faucet on full. Most soaker hoses will have a pressure restrictor (looks like a plastic disc) at the faucet end to reduce the pressure in the hose. If there is no restrictor, turn on the faucet so water slowly comes out of the soaker hose. Run the soaker hose for several hours.

The dry conditions that plague Texas have taken a toll on crops, cattle and landscapes. Extended dry periods may also cause shifting or cracking in the foundation of your home. When clay soil becomes extremely dry, the soil constricts and the foundation sinks. Unfortunately, when the foundation sinks, it sometimes sinks in different directions causing cracks. When clay soil receives moisture again it expands and lifts the foundation sometimes closing the cracks. Shifting in the foundation is most noticeable inside when doors are difficult to open and close or when you see cracks in walls particularly the corners.

Damage occurs when foundation cracks cause pipes to break, chimneys to shift and brick veneer to crack or separate. Try to protect your foundation before this happens by watering the soil around your foundation. Since dry soil shrinks away from foundations, walk around your house and look where the soil is against the foundation. You may have to pull back plants or even mulch to make this observation. If you do not see a gap between the soil and foundation, your soil moisture is good. If you see a gap between the foundation and the soil, you need to water the ground around your foundation.

# Suggestions for Keeping Clay from Drying and Shrinking Away from your Foundation

There are several suggestions for keeping the clay from drying and shrinking away from your foundation:

- Plant, water and grow plants around the foundation
- Create a dedicated irrigation zone around the house
- Water the foundation by attaching drip irrigation or soaker hose to an outdoor faucet with a timer

## Plant, water and grow plants around the foundation

Plants growing around the foundation of your house will protect the foundation by holding the soil and moderating soil temperature. Plant roots hold the soil and keep the soil from eroding away. Plants shade the soil preventing moisture from evaporating from the soil. When watering restrictions are limiting the number of times you are allowed to irrigate, you must make sure you are watering the most efficient way possible to take advantage of the limited irrigation time. Check your sprinklers to make sure each one is working properly. Set your irrigation controller to water several short concurrent cycles instead of one long cycle. This is called 'cycle and soak' irrigation method. Maintaining a 2"-4" layer of mulch in your landscape bedding also holds moisture. Do not cover your foundation with mulch as this may encourage pests like termites.



## Create a dedicated irrigation zone around the house



If you have an irrigation system, create a dedicated irrigation zone for your foundation. Install a drip irrigation zone about 8 to 18 inches from the foundation. If water restrictions ever go to 'no outdoor watering,' some cities may allow foundation watering. Check your city's 'Drought and Water Emergency Plans' to see what form of foundation watering they will allow.

## Water the foundation by attaching drip irrigation or soaker hose to an outdoor faucet with a timer

If you do not have an irrigation system, protect your foundation by installing drip irrigation or soaker hose around the foundation by connecting to your outdoor faucet. Drip irrigation works under low pressure so a pressure reducer is required when attaching to a faucet. Make sure you have a backflow preventer on the faucet. A backflow preventer prevents water from backing up into the house. Some new homes have them built in. Drip irrigation also requires a drip irrigation filter. Add a timer for convenience. There are many timers and several timers are battery powered and allow setting a day of week, time of day to start and runtime. Do not water directly in the crack.

## Foundation Problems

If you find cracks in the foundation, fill with foundation waterproofing, which is available in most hardware stores. Cracks also may appear in the concrete of a driveway, carport or garage. If there are cracks in the garage, you can usually assume that the cracks do not end there, but extend through the house. Call a foundation specialist for any major problems.

Drip Irrigation Connection to Garden Faucet

